2026 107th ARFTG Microwave Measurement Conference (ARFTG 2026)

Boston, Massachusetts, USA
12 June 2026

IEEE Catalog Number: CFP26ARF-POD
ISBN: 979-8-3195-2131-6

IEEE
Advancing Technology for Humanity

Copyright © 2026, IEEE

All Rights Reserved

Copyright and Reprint Permissions:

Abstracting is permitted with credit to the source. Libraries are permitted to photocopy beyond the limit of U.S. copyright law for private use of patrons those articles in this volume that carry a code at the bottom of the first page, provided the per-copy fee indicated in the code is paid through Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923.

For other copying, reprint or republication permission, write to IEEE Copyrights Manager, IEEE Service Center, 445 Hoes Lane, Piscataway, NJ 08854. All rights reserved.

*** This is a print representation of what appears in the IEEE Digital Library. Some format issues inherent in the e-media version may also appear in this print version.

IEEE Catalog Number:	CFP26ARF-POD
ISBN (Print-On-Demand):	979-8-3195-2131-6
ISBN (Online):	979-8-3195-2130-9
ISSN:	2836-1407

Additional Copies of This Publication Are Available From:

Curran Associates, Inc
57 Morehouse Lane
Red Hook, NY 12571 USA

Phone: (845) 758-0400
Fax: (845) 758-2633
E-mail: curran@proceedings.com
Web: www.proceedings.com

TABLE OF CONTENTS

VNA Tools: Noise Parameter Uncertainty Calculation 1
Michael Wollensack, Daniel Stalder, Johannes Hoffmann, Markus Zeier

Design and RF Performance Validation of a New Miniature Rectangular Waveguide Flange for Millimeter-Wave Frequencies and Above 9
James Skinner, Dave Richardson, Paul Hague, Nick M. Ridler

Interlaboratory Comparison and Reproducibility of On-Wafer S-Parameter Measurements Up to 220 GHz 13
Liam Ausden, Xiaobang Shang, Hyunji Koo, Hong Eun Choi, Jerdvisanop Chakarothai, Shinsuke Hara Tze-An Liu, Yi Chen, Leo Wang, Andrej Rumiantsev

A Fast and Reliable RF Probing Technique for Autonomous On-Wafer S-Parameter Measurements 17
F.A. Mubarak, D. Poduval, A. Khot, F. Gugole, S. Rajabali, M. Spirito

Automated Planarization of GSG Probes for on-Wafer RF Measurements Using a Nanorobotic Probe Station 22
Clément Lenoir, Mohamed Sebbache, Gia Ngoc Phung, Kamel Haddadi

Calibration of Scanning Microwave Microscopy via Substrate-Referenced Machine Learning 26
Yawei Zhang, Xiaopeng Wang, Marco Farina, James C.M. Hwang, Yunyue Zhu, Nannan Mao, Peng Wu Jing Kong

2-67 GHz Time-Domain Measurement Setup for Non-Linear Microwave Device Characterization Using Wideband Modulations 30
Nejem Ben-Youssef, Clément Hallepee, Damien Passerieux, Guillaume Neveux, Pierre Medrel Denis Barataud

Wideband NPR Characterization of a Ka-Band Power Amplifier Using a Single “Multi-Notch” Stimulus 34
Ricardo Escobar, Tibault Reveyrand, Sébastien Mons, Denis Barataud, Jean-François Villemazet

The Effect of Switch-Terms Correction on the Calibration Accuracy of Oscilloscope-Based NVNAs 38
Daniel Alonso-Tejera, J. Apolinar Reynoso-Hernández, Edgar Hernández-Limón, Diana Soto-Castañeda José Raúl Loo-Yau, M. Carmen Maya-Sánchez, Salvador Villarreal-Reyes

Minimizing Phase Error in Dual-Polarization Synthetic-Aperture-Based Millimeter-Wave OTA Measurements 42
Paritosh Manurkar, Kate A. Remley, Dylan F. Williams, Robert D. Horansky

Reliable RF-Probe Connection During a Temperature-Controlled OTA D-Band Array Antenna Measurement 46
L.A.M. Geubbels, N. Minamitani, A.B. Smolders, E. Meyer, A.C.F. Reniers

Analysis of Multiline Calibration Algorithms for Various Transmission Line Types Up to 220 GHz 50
Gregor Streitenberger, Gia Ngoc Phung, Ahmed Sayegh, Tianze Li, James C. M. Hwang

Inter-Laboratory Benchmarking of Continuous-Band 220 GHz S-Parameter Measurements of Millimeter-Wave GaN HEMTs 54
Thomas Bonnen, Rob Jones, Jerome Cheron, Benjamin Jamroz, Nicholas C. Miller

A Model-Centric Approach for Diagnosing Calibration Errors in RF and mm-Wave Device Characterization 58
Jeffrey Garrett, Mengqi Cui, Paulius Sakalas, Andrej Rumiantsev

Extracting Graphene Sheet Resistance in the WR-5 Band Using Graphene-Embedded CPW Shunt Structures on High-Resistivity Silicon 63
Zhuoya Zhou, Zirui Zhang, Liam Ausden, Xiaobang Shang, Yu-Wei Kang, Guangda Dai, Zhirun Hu

EM-Assisted Open-Short De-Embedding Technique for 16-nm FinFET Technology 67
Ciro Esposito, Federico D'Aniello, Gianni Bosi, Lorenzo Stevenazzi, Andrea Baschirotto, Valeria Vadalà

Measurement Uncertainties of Highly Reflective Low-Noise-Amplifiers for Magnetic Resonance Imaging 71
Fabian Schneider, Christof Pfannenmüller, Andreas Jöstingmeier, Maik Ehses, Gianluca Simone Bernadette Smith, Holger Maune, Fabian Lurz

Preliminary Results on Cryogenic on-Wafer Noise Parameter Measurements 75
James Kelly, Afesomeh Ofiare, Diogo Ribeiro, Steve Dudkiewicz, Nick Ridler, Chong Li

Dielectric Waveguide-Based Test Probes for Millimeter-Wave Range Test and Measurement Instrumentation 79
Guillermo Carpintero, Ashish Kumar, Sergio Rivera, Jiale Tian, Luis Gonzalez-Guerrero, Muhsin Ali Daniel Gallego, Alejandro Rivera-Lavado

Detection and Resolution of Low-Contrast Local Defects Using an Electromagnetic Jet Lens Applied to RF Shielding Materials 83
Mathis Granger, Bernard Bayard, Bruno Sauviac

Characterization of Magnetic Nanowire Array Materials Using Effective Thin Film Medium 89
Md Toaha Anas, Bethanie J.H. Stadler, Rhonda R. Franklin